## (19) World Intellectual Property Organization International Bureau





(43) International Publication Date 31 March 2005 (31.03.2005)

PCT

## (10) International Publication Number WO 2005/028745 A1

(51) International Patent Classification7: D21D 5/06. 5/02

(21) International Application Number:

PCT/SE2004/001204

(22) International Filing Date: 17 August 2004 (17.08.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0302530-1

24 September 2003 (24.09.2003) SE

(71) Applicant (for all designated States except US): METSO PAPER, INC [FI/FI]; P.O. Box 1220, FIN-00101 Helsinki (FI).

(72) Inventors; and

- (75) Inventors/Applicants (for US only): BERGDAHL, Anders [SE/SE]; Påskvägen 15, S-863 34 Sundsbruk (SE). LINDSTRÖM, Lars-Åke [SE/SE]; Svedjegatan 26, S-856 43 Sundsvall (SE).
- (74) Agent: HAGSTRÖM, Leif et al; Bergenstråhle & Lindvall AB, P O Box 17704, S-118 93 Stockholm (SE).

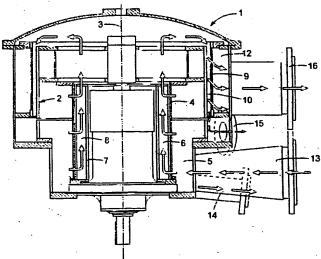
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FL, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS. JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A THICKENER FOR CONCENTRATION OF FIBRE SUSPENSIONS



(57) Abstract: A thickener for concentration of a fibre pulp suspension, comprises a rotatable screen member (4) having screen passages dimensioned for separating the fibre suspension into a first fraction that passes through the screen member and substantially contains fibres and a second fraction that does not pass through the screen member and contains coarse undesired particles. A stationary thickening member (9) with a multiplicity of through holes surrounds the screen member and separates the created first fraction into a third fraction passing through the thickening member, and a fourth fraction not passing through the thickening member. The holes of the thickening member (9) are dimensioned such that liquid but not fibres is permitted to pass through the thickening member, whereby the fourth fraction of the fibre suspension produced during operation is constituted by concentrated fibre pulp free from undesired coarse particles.

BEST AVAILABLE COPY